

# Mineral Industry Surveys

---

For information, contact:

Thomas S. Jones, Manganese Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4973, Fax: (703) 648-7757  
E-mail: [tjones@usgs.gov](mailto:tjones@usgs.gov)

Jesse J. Inestroza (Data)  
Telephone: (703) 648-7968  
Fax: (703) 648-7975

MINES FaxBack: (703) 648-4999  
Internet: <http://minerals.usgs.gov/minerals>

## MANGANESE IN NOVEMBER 1999

In November, reported consumption of manganese ore containing 35% or more manganese, exclusive of that at iron and steel plants, was 33,300 metric tons, which was a decrease of about 12% compared with that for the previous month, according to the U.S. Geological Survey. This brought the revised year-to-date total to 409,000 tons. The figures for November increase to 37,500 tons and 455,000 tons when estimates for annual respondents are added on the basis of 1998 data. Corresponding industry stocks of ore at the end of the month were 176,000 tons, which includes an estimate for annual respondents on the basis of 1998 data. This was the same as the corresponding figure for stocks at the end of October.

Data for domestic consumption and stocks of manganese ferroalloys and metal for the April through June quarter of 1999 will appear in a subsequent monthly report.

Foreign trade data for November will appear in a subsequent report. For October, the data tabulated in this report indicated that for manganese dioxide and low-carbon ferromanganese the import volume for the year to date now slightly exceeded that for all of 1998. Also for October, the number of manganese units exported

as ferromanganese was the least since June 1996. **Note:** For early availability, the trade data appearing in this report are being placed on MINES FaxBack in preliminary form. The data for October were placed on FaxBack as of December 28. The FaxBack document number for the November trade data will be 420211.

The Defense Logistics Agency, U.S. Department of Defense, reported for November no cash disposals of manganese materials from the National Defense Stockpile.

### Update

The October 1999 issue of *Ore Geology Reviews* (v. 15, nos. 1-3) is devoted to "Manganese and associated ore deposits of China." This issue consists of 10 chapters, the first of which is an overview of manganese deposits in China. The other chapters present geologic and resource information for 10 specific deposits. This special issue was edited by J.R. Hein of the U.S. Geological Survey, Menlo Park, CA, and D. Fan of the Institute of Geology, Beijing, China. Dr. Hein's e-mail address is [jhein@usgs.gov](mailto:jhein@usgs.gov). *Ore Geology Reviews* is published by Elsevier Science, whose U.S. e-mail address is [usinfo-f@elsevier.com](mailto:usinfo-f@elsevier.com).

TABLE 1  
SELECTED U.S. FOREIGN TRADE IN MANGANESE 1/

(Metric tons, manganese content) 2/

	Imports for consumption			Exports		
	Ore and dioxide	Ferroalloy and metal	Total	Ore	Ferroalloy and metal	Total
1998: 3/						
October	30,100	29,500	59,600	861	2,040	2,900
January-October	166,000	431,000	597,000	3,260	18,400	21,600
1999:						
January	16,300 4/	48,300 4/	64,600	95	1,850	1,940
February	17,900 4/	40,700 4/	58,700	13	1,160	1,170
March	22,100 4/	40,100 4/	62,200	75	1,500	1,570
April	18,300 4/	39,800 4/	58,100	24	1,250	1,280
May	33,100 4/	23,900 4/	57,000	135	1,370	1,500
June	31,900 4/	47,800 4/	79,700	46	1,270	1,320
July	67,200 4/	29,700 4/	96,900	385	1,190	1,570
August	25,800 4/	43,700 4/	69,600	75	953	1,030
September	1,910	23,600 4/	25,500	96	720	816
October	25,400 4/	44,300 4/	69,700	78	878	956
Total	260,000	382,000	642,000	1,020	12,100	13,200

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

3/ Data may include revisions by the Bureau of the Census.

4/ All or part of these data have been referred to the Bureau of the Census for verification.

Source: Bureau of the Census.

TABLE 2  
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN OCTOBER 1999 1/

(Metric tons)

Source	Gross weight	Mn content	Customs value	Year to date		
				Gross weight	Mn content	Customs value
Australia	5,010	3,310	\$2,130,000	54,200	36,100	\$20,500,000
Canada	76	50	20,000	113	75	30,100
France	--	--	--	6,740	4,500	2,930,000
Georgia	5,290	3,880	2,170,000	7,790	5,770	3,170,000
India	--	--	--	5,020	3,140	2,150,000
Kazakhstan	8,540 2/	4,050 2/	3,430,000 2/	25,400	15,400	9,910,000
Mexico	5,300	3,490	2,230,000	50,000	32,800	21,200,000
South Africa	7,780	5,230	3,140,000	69,400	46,700	27,000,000
Spain	--	--	--	951	597	615,000
Ukraine	--	--	--	8,190	6,030	2,850,000
Venezuela	2,880	1,890	1,150,000	14,200	9,350	5,370,000
Total	34,900	21,900	14,300,000	242,000	161,000	95,700,000
Total, general imports	34,900	21,900	14,300,000	241,000	160,000	95,500,000

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ All or part of these data have been referred to the Bureau of the Census for verification.

Source: Bureau of the Census.

TABLE 3  
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN OCTOBER 1999 1/

(Metric tons)

Source	Gross weight	Mn content	Customs value	Year to date		
				Gross weight	Mn content	Customs value
Low carbon:						
China	--	--	--	1,150	990	\$1,130,000
Italy	209	188	\$292,000	3,400	2,900	4,070,000
Japan	--	--	--	6,500	5,540	5,610,000
Mexico	300	239	272,000	1,520	1,220	1,380,000
Netherlands	--	--	--	43	45	31,700
Russia	--	--	--	21	6	17,700
Slovenia	--	--	--	9	7	5,220
South Africa	420	391	651,000	1,630	1,490	2,430,000
Ukraine	--	--	--	60	57	64,800
United Kingdom	--	--	--	445	417	296,000
Total, low carbon	929	818	1,210,000	14,800	12,700	15,000,000
Total, general imports of low carbon	929	818	1,210,000	14,800	12,700	15,000,000
Medium carbon, 1%-2% C:						
France	--	--	--	2,720	2,220	1,510,000
Japan	--	--	--	424	361	511,000
Korea, Republic of	--	--	--	8,550	6,960	5,000,000
Mexico	1,190	955	675,000	21,700	17,500	12,500,000
Norway	--	--	--	20	9	18,600
South Africa	750	613	408,000	18,400	14,900	10,500,000
Total, m.c., 1%-2% C	1,940	1,570	1,080,000	51,800	41,900	30,100,000
Total, general imports of m.c., 1%-2% C	1,940	1,570	1,080,000	51,800	41,900	30,100,000
High carbon:						
Australia	2,000	1,530	730,000	7,400	5,630	3,060,000
Brazil	--	--	--	6,580	5,000	2,430,000
China	4,000	2,920	1,540,000	6,000	4,420	2,260,000
France	5,000	3,950	1,930,000	83,000	64,100	40,100,000
Saudi Arabia	--	--	--	1,270	994	463,000
South Africa	13,500	10,500	4,680,000	96,800	75,200	36,200,000
Total, high carbon	24,500	18,900	8,890,000	201,000	155,000	84,500,000
Total, general imports of high carbon	24,500	18,900	8,890,000	201,000	155,000	84,500,000
Grand total	27,400	21,300	11,200,000	268,000	210,000	130,000,000
Grand total, general imports	27,400	21,300	11,200,000	268,000	210,000	130,000,000

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 4  
U.S. IMPORTS 1/ OF MANGANESE ORE (20% OR MORE MN) IN OCTOBER 1999 2/

(Metric tons)

Source	20% - 47% Mn		47% or more Mn		Total	
	Gross weight	Mn content	Gross weight	Mn content	Gross weight	Mn content
Australia	--	--	19,500	10,200	19,500	10,200
Gabon	--	--	21,900 3/	11,700 3/	21,900	11,700
Mexico	410	180	--	--	410	180
Morocco	--	--	20	11 4/	20	11
South Africa	1,450	666	--	--	1,450	666
Total	1,860	846	41,400	21,900	43,300	22,700
Year to date:						
Australia	--	--	44,900	23,500	44,900	23,500
Belgium	138	55	7,260	6,680	7,400	6,740
Brazil	--	--	2	1	2	1
China	--	--	40	33	40	33
Gabon	37,900	12,400	212,000	100,000	250,000	112,000
Ghana	26,100	10,200	--	--	26,100	10,200
Mexico	17,600	6,740	1,090	523	18,700	7,270
Morocco	--	--	100,000	50,000	100,000	50,000
South Africa	1,450	666	58,000	29,200	59,400	29,800
Total	83,200	30,000	423,000	210,000	507,000	240,000

1/ Quantities for general imports and imports for consumption are identical.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ All or part of these data have been referred to the Bureau of the Census for verification.

4/ Includes U.S. Geological Survey's conversion of reported data (from apparent MnO<sub>2</sub> content to Mn content).

Source: Bureau of the Census.

TABLE 5  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE AND MANGANESE METAL IN OCTOBER 1999 1/

(Metric tons, gross weight)

Source	Manganese dioxide				Manganese metal			
	Year to date		Year to date		Unwrought		Other	
					Quantity	Year to date	Quantity	Year to date
	Quantity	Customs value	Quantity	Customs value				
Australia	2,500	\$3,530,000	17,400	\$24,500,000	--	--	--	--
Belgium	36	52,600	518	808,000	--	--	--	--
Canada	--	--	--	--	--	--	20	22
China	--	--	7	10,200	280	2,030	80	576
France	--	--	23	68,500	--	--	2	27
Germany	6	33,900	66	352,000	18 2/	--	--	81
Greece	--	--	16	21,500	--	--	--	--
India	--	--	--	--	--	--	--	16
Ireland	1,070	1,480,000	6,570	9,220,000	--	--	--	--
Japan	--	--	16	21,400	--	--	12	16
Mexico	--	--	--	--	--	--	--	20
Netherlands	--	--	--	--	--	--	2	24
South Africa	938	1,360,000	8,530	12,100,000	624	7,680	--	--
Spain	--	--	--	--	4	40	--	--
Ukraine	--	--	--	--	--	251	--	--
United Kingdom	--	--	82	211,000	62 2/	347	--	(3/)
Total	4,540	6,460,000	33,200	47,300,000	989	10,600	117	783
Total, general imports	4,540	6,460,000	33,200	47,300,000	989	10,800	117	783

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ All or part of these data have been referred to the Bureau of the Census for verification.

3/ Less than 1/2 unit.

Note: Imports for consumption of metallic manganese waste and scrap totaled 28 tons, all of which was from Canada, to give a year-to-date total of 146 tons.

Source: Bureau of the Census.

TABLE 6  
U.S. EXPORTS OF MANGANESE ORE (20% OR MORE MN), FERROMANGANESE,  
SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN OCTOBER 1999 1/

(Metric tons, gross weight)

	Manganese ore		Ferromanganese, 2% or less C		Silicomanganese		Manganese metal 2/	
	October	Year to date	October	Year to date	October	Year to date	October	Year to date
Australia	--	--	1	1	3	33	--	(3/)
Belgium	--	--	--	--	--	--	--	39
Brazil	--	--	--	--	--	--	--	124
Canada	120	996	167	2,740	450	2,670	119	1,210
Colombia	--	--	--	18	--	--	--	19
France	--	11	--	--	--	14	(3/)	(3/)
Germany	--	--	--	--	--	--	--	1
Hong Kong	--	--	--	--	--	--	(3/)	1
India	--	--	--	--	--	--	(3/)	1
Italy	--	--	--	--	--	--	--	33
Japan	--	--	--	--	--	--	4	555
Korea, Republic of	--	63	--	--	--	--	--	11
Mexico	--	--	--	24	14	226	5	73
Netherlands	--	--	--	--	--	19	--	190
Peru	36	91	--	--	--	--	--	--
Singapore	--	747	--	--	--	--	--	--
Spain	--	--	--	--	--	10	--	(3/)
Sweden	--	--	--	--	--	--	19	98
Taiwan	--	--	--	--	--	--	1	8
United Kingdom	--	136	--	9	--	--	38	538
Total	157	2,040	169	2,790	467	2,970	187	2,900

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes manganese-aluminum, some other alloys, and waste and scrap.

3/ Less than 1/2 unit.

Note: Exports of ferromanganese with more than 2% carbon totaled 316 tons, of which 286 tons went to Canada, 20 tons went to Venezuela, and 10 tons went to Mexico, to give a year-to-date total of 6,410 tons.

Source: Bureau of the Census.

TABLE 7  
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN OCTOBER 1999, BY CLASS 1/

Class	Gross weight (metric tons)	Value 2/ (thousands)	Principal sources and destinations: gross weight (metric tons); value (thousands) 2/	Year to date		
				Gross weight (metric tons)	Value 2/ (thousands)	Principal sources and destinations: gross weight (metric tons); value (thousands) 2/
Imports for consumption:						
Manganese oxides other than dioxide	107	\$217	Belgium 37; \$73	1,530	\$1,620	Mexico 720; \$138
Sulfates, basket category, including manganese sulfate	1,950	1,510	Mexico 1,120; \$672	33,600	17,600	Mexico 15,900; \$8,070
Potassium permanganate	109	201	India 36; \$65	1,210	2,320	Czech Republic 579; \$1,080
Manganites, manganates, and other permanganates	(3/)	3	Belgium (3/); \$3	(3/)	6	United Kingdom (3); \$3
Exports:						
Manganese dioxide	189	282	Canada 66; \$41	9,320	7,060	United Kingdom 5,110; \$1,630
Manganese oxides other than dioxide	950	1,030	United Kingdom 396; \$551	4,710	4,350	Canada 2,750; \$1,090
Sulfates, basket category, including manganese sulfate	1,290	846	Canada 957; \$324	16,700	7,680	Canada 14,100; \$4,200
Potassium permanganate	84	151	United Kingdom 45; \$89	1,010	1,850	United Kingdom 322; \$654
Manganites, manganates, and other permanganates	7	48	United Kingdom 5; \$41	219	1,050	United Kingdom 90; \$608

1/ Data are rounded to three significant digits.

2/ For imports, Customs value; for exports, f.a.s. value.

3/ Less than 1/2 unit.

Source: Bureau of the Census.